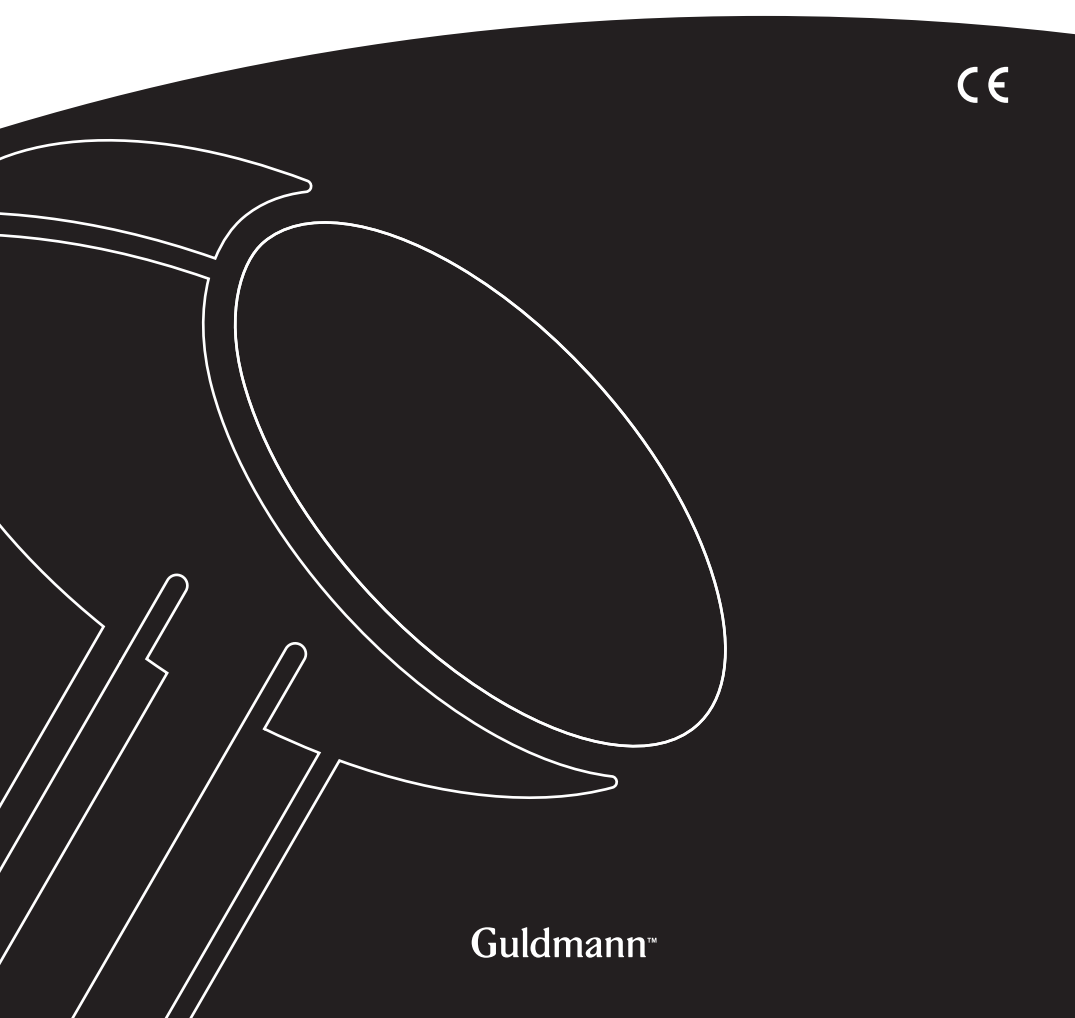




## GB/US . . . .GH1 F Ceiling Hoist

Vers. 10.00

CE



Guldmann™

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## GH1 F Ceiling Hoist

### Hoist numbers:

55xxxx

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**1.00 GH1 F use**

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**1.01 Manufacturer**

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Graham Bells Vej 21-23A  
DK-8200 Aarhus N  
Tel. + 45 8741 3100  
Fax + 45 8741 3131  
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**1.02 Intended use**

GH1 F is a lifting module that covers the need for lifting and moving a person with disabilities, and for walking training.

GH1 F is intended for use in hospitals, nursing homes, rehabilitation centres and in private homes, riding schools, swimming pools and buildings.

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**1.03 Conditions for use**

The use of the GH1 F is subject to the following:

- The GH1 F should only be used by trained personnel.
- The maximum nominal load, 175 kg (385 lbs), 205 kg (450 lbs) and 255 kg (560 lbs), respectively, must not be exceeded (*section 1.04*).
- The instruction offered by Guldmann to all customer groups in connection with the purchase of a ceiling-mounted hoist has been received.
- The helper pays attention to the well-being of the user when using the hoist.
- The hoist is used in rail systems which are installed, tested and approved according to DS/EN 10535 and Guldmann's stipulations.
- Only technicians who have been certified by Guldmann may install and test the rail systems.
- The hoist is used with a Guldmann lifting hanger (*section 1.08*).
- The hoist is used with a Guldmann lifting sling or with other suitable slings (*section 1.09*).

The flexibility of GH1 F lies in the fact that it can be rapidly and easily – with the least manual handling – transferred from one rail system to another. Installing it on and deinstalling it from a rail system is partially automated and is carried out without the use of any tools.

GH1 F with lifting accessories is transported and stored in a specially designed transport trolley.

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## 1.04 Important/Precautions

- Read the instructions carefully before using the hoist and in connection with cleaning and service of the hoist
- The hoist's maximum load must never be exceeded.
- The hoist may only be used to lift a person.
- The red strap for the emergency stop and the emergency lowering must be adjusted to the helper's reach, and must not be removed.
- If a defect appears during use of the hoist, stop using the hoist and contact the Guldmann Service Team for repairs.
- The hoist is controlled by a microprocessor PCB, which can be damaged by static electricity if touched without the necessary precautions, (*see point 1.08*) The electronics may only be serviced by Guldmann approved service technicians.
- For safety reasons the side cover may only be dismantled when the emergency stop is activated (*see point 3.01*).
- The user may not hold their hands around the lifting strap during lift and transfer.
- The lifting hanger must not be mounted or replaced when the hoist is positioned over the patient.

### Re: EMC

If electromagnetic or other influences occur between this product and other products, these products must not be used together.

---

## 1.05 Load limits on your GH1 F system

Read the labels which indicate the maximum load limits of the components.

The component which has the lowest load limit, e.g. the lifting hanger, the lifting sling, or other equipment, determines the maximum load limit of the entire system. The maximum load limit must not be exceeded.

Please note that the load limit may change when different components are used on a daily basis, e.g. lifting hangers, lifting slings.

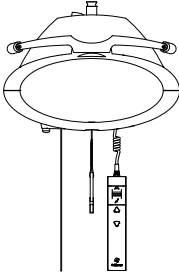
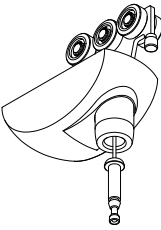
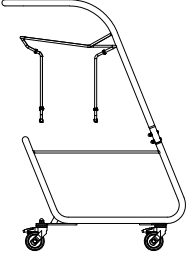
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## 1.06 Unpacking and preparation

### Visual check of GH1 F

If it appears that GH1 F has been damaged when you unpack it, it must not be used until it has been checked by a qualified person or by the Guldmann Service Team.

## Contents of the boxes

		
<p><b>GH1 F hoist module</b> Hand control Charger Manual</p>	<p><b>Travelling trolley for GH1 F</b> Label for rail system Manual</p>	<p><b>Transport trolley for GH1 F</b> Handle Underframe Bag for sling Two holders for cross lifting hanger Nuts and bolts Manual</p>

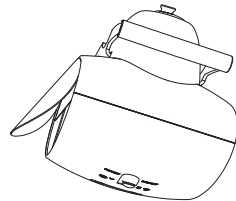
### Button for reset of emergency stop

GH1 F is delivered with the emergency stop activated in order to ensure that the battery is not being discharged during long-term storage. To deactivate the emergency stop, the plastic cap around the “reset” button must be removed, and the “reset” button must be pressed in.

### Mounting of side cover

GH1 F is standard delivered with side cover in white and yellow.

Before starting to mount the side cover it is important, for safety reasons, to make sure that the emergency stop is activated (see point 3.01).

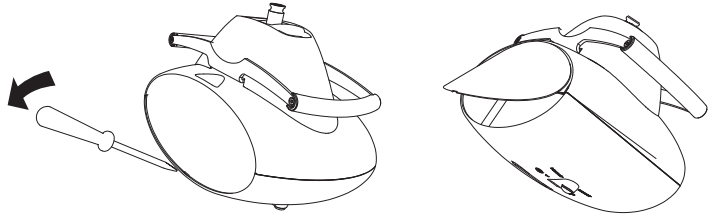


The chosen side covers are fitted on the side of GH1 F by bending the cover slightly and placing it in the groove at the side of GH1 F.

### Exchange of side cover

If you want to change the appearance of GH1 F, the side cover can be exchanged or turned. Before starting to mount the side cover it is important, for safety reasons, to make sure that the emergency stop is activated.

The side cover is dismantled by inserting for instance a flat screwdriver in the opening between the groove and the cover and tilt the cover upwards and out. The side cover is fitted on the side of GH1 F by bending the cover slightly and placing it in the groove on the side of GH1 F.



---

### 1.07 Placing a new GH1 F hoist in an existing rail system

Please notice, when placing a new GH1 F hoist in an existing rail system it must be ensured that:

- The rated max load of the rail system, must be equal or higher than the max load of the new hoist.
  - If there is no max load mentioned on the rail system, the rail system must then be checked according to the guideline in the installation manual (distance between bracket according to max load).
  - If the brackets are not visible, then a load test with  $1.5 \times$  max load of the hoist must be performed minimum 20 min. During the test the deflection of the rails must not be higher than  $1/200$  of the length of the rail.
  - If it is not possible to do any of the above mentioned, please contact Goldmann or their representative.
- If the rail system can not be rated to the same max load as the hoist, then extra brackets must be installed according to the installation manual (distance between brackets according to max load).

---

### 1.08 Power supply

GH1 F is equipped with a battery that requires regular recharging. The power supply must be connected to the power socket. The enclosed power supply must always be used.

#### Safety concerning static electricity (ESD)

Service technicians and installers **must** use an ESD-safety package consisting of a mat, a ground wire, and a bracelet.

The technician/installer connects the mat to a grounding point, for instance a radiator or a water pipe. The technician/installer must then put on the bracelet and connect it to the mat. If it is not possible to find a grounding point, the mat and the bracelet must be used as a minimum.

Only then is it allowed to work with the PC Board or components where it is possible to come into contact with the PC Board.

Lifting hangers from other manufacturers Guldmann shall not be liable for faults or accidents that may occur as a result of using lifting hangers made by other manufacturers.

If there is any doubt about the selection or use of a lifting hanger, please contact your supplier.

The lifting hanger can be installed to the lifting strap without the use of any tools.

Hold the lifting hanger in the right hand and press the yellow button using the thumb as shown (Fig. 1).

Insert the strap attachment in the slot on the lifting hanger top cover with the open side facing down (Fig. 2a, 2b) and release the yellow button (Fig. 2c).

Rotate the strap attachment to a vertical position (fig. 3).

Check that the yellow button has returned to its locked position by checking that it is flush with the cover of the lifting hanger and that the strap attachment can rotate freely.



Fig. 1



Fig. 2a



Fig. 2b



Fig. 2c



Fig. 3



## 1.10

### Lifting sling

A lifting sling with four to eight lifting straps designed for mounting on hooks should be used when using a Guldmann lifting hanger. Place the straps on the hooks. Make sure that the rubber safety catch returns to its start position, so the straps can not unintentionally fall off.

#### Slings made by other manufacturers

Guldmann shall not be liable for faults or accidents that may occur as a result of using lifting slings made by other manufacturers.

***If there is any doubt about the selection or use of a lifting sling, please contact your supplier.***

Guldmann shall not be liable for faults or accidents due to incorrect use of the lifting sling, or for reasons of inadequate attention on the part of the carer or user.

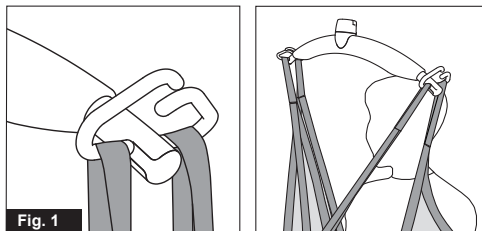
#### Attaching the lifting sling

Place the straps from the lifting sling on the hooks on the lifting hanger. Start with the uppermost set of straps (from the back) and then take the lowest set of straps (from the legs).

#### GH lifting hanger, 4 attachment points

##### Caution!

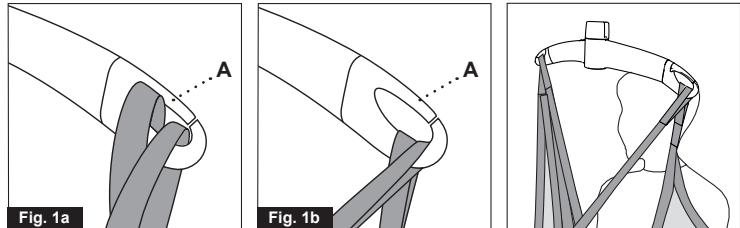
**Be careful when attaching the lifting sling's straps on the hooks. Check that the straps have been correctly placed in the lifting hanger's hooks. When pressing the up button on the hand control to lift the user, check again that all straps remain correctly placed in the lifting hanger's hooks (Fig. 1).**



## GH Lifting hanger

### Caution!

Be careful when attaching the lifting sling on the hooks. Check that the straps have been pulled completely through the rubber safety catch (A) and into place in the lifting hanger's hooks. When pressing the up button to lift the user, check again that all the straps remain correctly placed in the lifting hanger's hooks (*fig. 1a and fig. 1b*).



### Lifting to and from a seated position

When lifting a user from e.g. a wheelchair, move the GH1 F towards the person to be lifted. The lifting hanger should be at the same height as the user's chest and should not be moved further in over the user than to approximately mid-thigh position.

Place the lifting hanger parallel to the user's shoulders.

Place the lifting sling behind the user's back between the back of the chair and the user's back. The center marks of the lifting sling should follow the user's spine.

Lead the leg straps along the outer sides of the user's shins and beneath the thighs between the hollow of the knees and the hip joints. Cross the leg straps in front of the user.

All four lifting straps are now ready to be attached. The lifting sling can now be mounted on the lifting hanger.

### Lifting to and from lying position in bed

Bring the lifting hanger over the centre of the person to be lifted. Place the lifting hanger parallel to the user's shoulders.

Turn the user onto his or her side. The present sling should be placed so that its top is at the same height as the top of the user's head. Now position the sling over the user so that the center marks follow the user's spine. Turn the user onto his or her back and pull out the remaining part of the lifting sling.

Place the leg straps beneath the user's thighs and cross them. All four lifting straps are now ready to be attached and the lifting sling can now be mounted on the lifting hanger. It is an advantage to elevate the head of the bed so that the user is sitting up.

For further information, please refer to the user manual for the lifting sling in question.

**Important!**

Only persons who have received competent instruction regarding the use of lifting equipment and fitting of slings should use the hoist.

Plan the move. Avoid leaving the user in the lifting sling unattended.

The hoist lifts quickly and powerfully. Before lifting, check that the user is completely free of his/her surroundings. The user's head, arms, hands and feet must not be in danger of becoming trapped. Be careful with any tubes and wires that are attached to the user. The user should not hold the lifting strap during the moving procedure as there is a risk of crushing between the strap's hook and the hoist. Check that the hand control and hand control cable is free of hanger, patient and other object before the hoist is activated up or down moved.

If the hoist is used correctly, the user should only be lifted to the extent that she/he is clear of the surface and should be moved at this height.

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**1.11 Swing kit**

A swing kit must not be used in conjunction with GH1 F.

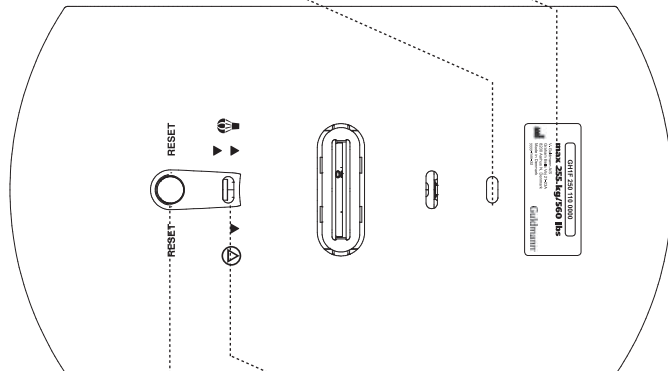
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**2.00 Description of functions**

Information panel on the GH1 F bottom surface.

*Designation of type and maximum load*

*Green/yellow indicator lamp*



*Strap for activating emergency stop and emergency lowering device*

*Button for resetting the emergency stop*

## 2.01 Pictograms



▼ Emergency stop



▼ Emergency lowering function

**RESET**

Reset emergency stop



Danger - rotating parts



Release button

## 2.02 Indicator lamps and audio signals

Status	Indicator lamps	Audio signals	Possible GH1 F Functions		
			Up	Down	Emergency lowering
Off – stand by	Off				
All OK	Green		✓	✓	✓
Low battery	Yellow		✓	✓	✓
Fault on hoist	Yellow	Beeps at button activation			✓
Battery critical low	Yellow			✓	✓
Over load	Green	Beeps at button activation		✓	✓

## 2.03 Audio signals

### Short, consecutive audio signals



)) )) )) ))

GH1 F's installation function has been activated.

### Long, continuous audio signal



)) )) )))) )) ))

The installation/deinstallation sequence has been interrupted or completed.

**Operation**

The GH1 F is switched on automatically when a button on the hand control is pressed.

The GH1 F is switched off automatically after approx. 8 minutes without activation.

**Hand control**

The hand control for GH1 F is used to control the following functions:

**A. Installing and deinstalling the lifting module**

1. Installing
2. Deinstalling

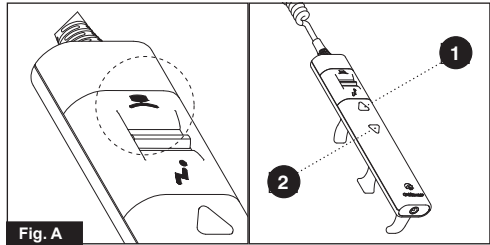


Fig. A

**B. Lifting and lowering a person**

1. Lift
2. Lower

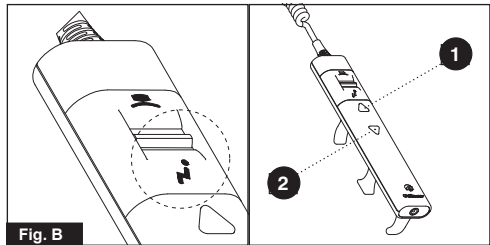


Fig. B

**Note:** There must be a load on the lifting strap corresponding to the weight of Goldmann's lifting hanger before GH1 F's lowering function will operate.

The lifting/lowering function will be switched off if the emergency stop/emergency lowering system is activated (*point 3.01*).

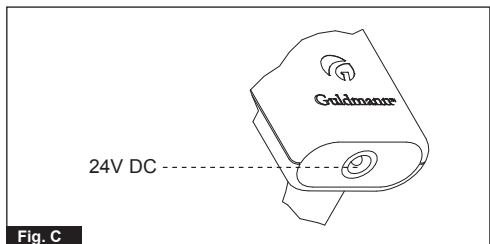
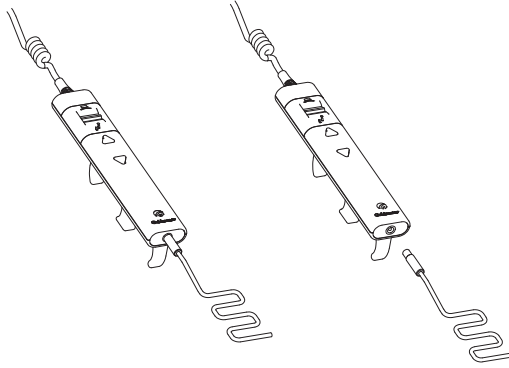
**C. GH1 F is charged with the help of the DC connection on the hand control**

Fig. C

### Charging / connection

GH1 F charges when the plug from the power supply is connected with the hand control. The plug shall always be placed in the hand control when the GH1 F is not in use. This ensures that the GH1 F always functions and is ready for use.

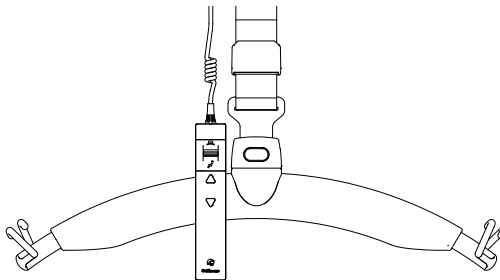
The Power Supply shall be connected before charging through the hand control can take place. A green diode at the power supply indicates that it is plugged in and switched on.



The indicator lamp on the bottom of the hoist turns yellow if the charge status becomes low. The GH1 F then has a limited number of lifts available at a time and must be recharged.

### Placing of the hand control

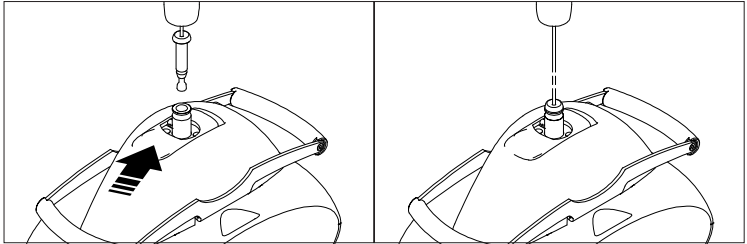
The hand control can be placed on the hanger bar if necessary in connection with storage or transfer.








**Preparation, installation**

Place the transport trolley containing GH1 F vertically beneath the travelling trolley in the rail system. Check that there are no obstacles of any kind between GH1 F and the travelling trolley.

1. Attach the travelling trolley's anchor with cord to the locking mechanism on the top of GH1 F.






2. Choose the function "Installation" with the help of the switch at the top of the hand control (  (  » » » » ) )
3. Installation will start by activating the hand control, by shortly pressing the button up 
4. Installation has been completed when GH1 F is automatically locked in the travelling trolley (  » » » » » » » » )
5. Move the switch at the top of the hand control to position to complete installation 

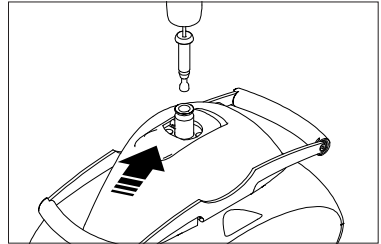
We recommend steering/guiding GH1 F with the hanger so that it is free from the transport trolley during installation.


The GH1 F lifting module must not be allowed to swing from side to side during installation.

### Deinstallation

Where applicable, remove the lifting sling from the lifting hanger.  
Place the transport trolley beneath the travelling trolley in the rail system.  
Check that there are no obstacles of any kind between GH1 F and the transport trolley.

1. Lift the strap with the hanger towards the end stop on GH1 F
2. Choose the function "deinstallation" with the help of the switch at the top of the hand control  (  » » » » )
3. Deinstallation will start by activating the hand control, by shortly pressing the button down 
4. Deinstallation has been completed when GH1 F is on the transport trolley and the movement of the cord has stopped
5. Release the travelling trolley's anchor with cord from the locking mechanism on the top of GH1 F.



6. Move the switch at the top of the hand control to position 

We recommend steering/guiding GH1 F with the hanger into position on the transport trolley during deinstallation.

#### **Please note**

All deinstallation must be begun by briefly moving GH1 F (1-2 seconds) in an upward direction.

It is not possible to begin the installation and/or deinstallation sequence for GH1 F when the load on the lifting strap exceeds the standard weight of the lifting hanger, e.g. if a person is sitting in the lifting sling.

For the same reason a bath chair, a bath stretcher, Horizontal Hoist BS, and the cross lifting hanger must be removed before installing/deinstalling GH1 F.

The installation/deinstallation function will be switched off if the emergency stop/emergency lowering function is activated (*point 3.01*).



---

**2.07****Lock, Travelling trolley for GH1 F**

The locking mechanism/clutch on the travelling trolley is automatic and changes between a locked and an unlocked state. It changes states each time it is activated.

Avoid unnecessary contact with the lock.

Contact the Guldmann Service Team if it appears that the lock may be damaged.

---

**3.00****Transport/running in the rail system**

GH1 F is moved around in the rail system by the helper/assistant.

**Note**

GH1 F may not be exposed to cold / heat shock. For instance do not bring a cold hoist into a warm bathroom or similar.

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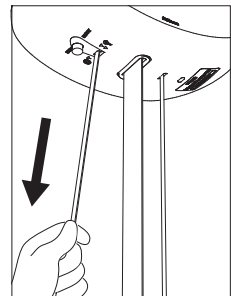
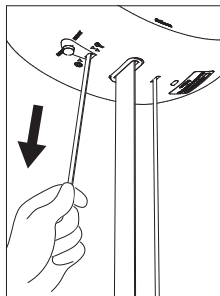
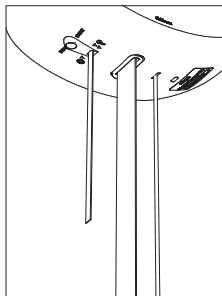
**3.01****Safety functions**

The emergency stop and emergency lowering device should only be used in an emergency. In the event that it is necessary to use the safety functions, the fault must be identified and rectified before the GH1 F is taken into use again. Please contact your supplier.

**Emergency stop and lowering strap**

The red strap has the following functions:

- One pull: Emergency stop is activated.
- Constant pull: Emergency lowering is activated.



### Emergency stop

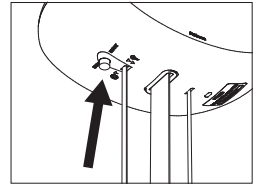
If the GH1 F does not stop/react to the hand control when the GH1 F is in use, pull the red strap and the lifting/lowering functions (except emergency lowering) are deactivated.

When the emergency stop is activated, the hoist will not function. The green lamp is switched off.

### Reset emergency stop

Reset the emergency stop by pressing the yellow button on the bottom of the hoist.

The yellow button that appears when the emergency stop is pulled, must be pressed manually before the GH1 F is ready for use.



### Emergency lowering function, electric

If the GH1 F fails, the electrical emergency lowering function is used to lower the user safely. The emergency lowering function is operated by a constant pull on the red strap that is used for the emergency stop.

When releasing the red strap, the emergency lowering function will be replaced by the emergency stop.



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## 3.02

### Safety functions, installation/deinstallation

#### Installation/deinstallation

The installation/deinstallation sequence can be interrupted with the hand control at any time:

1. Press (again) UP  to interrupt the installation/deinstallation sequence
2. Press (again) DOWN  to interrupt the installation/deinstallation sequence

The installation sequence will be automatically interrupted if GH1 F meets an obstacle/resistance ( $\geq 5\text{-}10\text{ kg}$ ) while being moved to the travelling trolley in the rail system, for instance when blocked by a foreign body during installation.

If this happens, GH1 F will stop briefly and then move freely in the direction of the travelling trolley.

#### Resuming installation/deinstallation

When the obstacle has been removed, the installation or deinstallation sequence can be resumed, cf. point 2.05.



Activation of the emergency stop results in an interruption of the installation sequence



Activation of the emergency lowering results in an interruption of the installation sequence

### 3.03

#### Installation lock

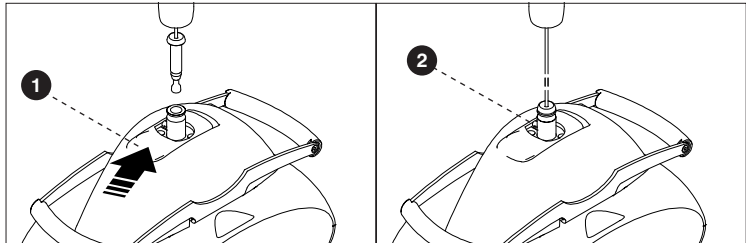
It is a condition for carrying out installation and deinstallation that the anchor is attached to GH1 F. The anchor is attached/released with the help of the push button on the top of GH1 F (1).

#### **Important/precaution**

The installation lock may only be operated/released when GH1 F has been deinstalled and placed on a firm surface, e.g. the transport trolley for GH1 F. The deinstallation sequence must have been completed before the installation lock is released. This means that the movement of the cord must have stopped and the installation motor must be inactive.

#### **Attachment to the installation lock**

- Push in the button (1)
- Attach the anchor with the cord from the travelling trolley
- Release the button and check that it returns fully to its original position



#### **Releasing the installation lock**

- Wait for deinstallation to end and until GH1 F has been placed on a firm surface, such as the transport trolley for GH1 F
- Push in the button (1)
- Release the anchor with cord from GH1 F

Place the anchor with cord at a suitable height beneath the travelling trolley.

#### **Installation protection**

There is a sensor/switch on top of GH1 F, which has a safety function (2)  
The hand control will be switched off when the sensor/switch is activated.

Avoid unnecessary contact with the sensor.

Contact the Guldmann Service Team if it appears that the sensor has been damaged.

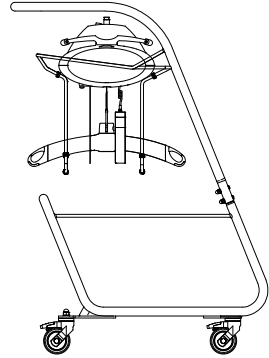
### Transport trolley for GH1 F

The transport trolley is used to transport and store GH1 F with lifting accessories. There is a specially sewn bag at the bottom of the transport trolley to store lifting slings, the GH1 F power supply, and the manual. The bag can hold up to three lifting slings, depending on the type in question.

The power supply can be placed in the front pocket of the bag.

The cross lifting hanger can be hung from the hooks at the front of the transport trolley. Remove the lifting strap from the cross lifting hanger before installation/deinstallation.

The bag can be removed and washed if it is dirty. Follow the washing instructions on the bag. If necessary, contact your supplier to order a new bag if the old one is worn or damaged.



### Note

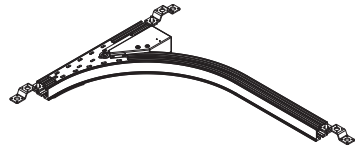
We recommend lifting the lifting strap/lifting hanger towards the end stop on GH1 F before placing it on the transport trolley. This will protect the lifting strap against unnecessary wear during transport and while stored on the transport trolley.

### Guldmann – Lifting slings and hangers

Obtain a product catalogue from Guldmann, or see our product range at [www.guldmann.com](http://www.guldmann.com) where it is also possible to watch a video about the use of lifting slings and to download user manuals for our products.

### Switch track, electrical

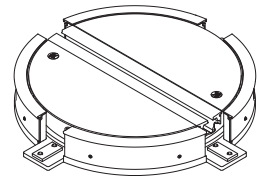
A switch track can be used in rail systems where it is used to change direction.



### Turntable

The turntable is used in rail systems where the hoist needs to run in several directions.

The GH1 hoist is placed in the center of the turntable. By pressing the switch, the turntable rotates 90°. Press again, and the turntable returns to the first position.



### Safety

This product is mechanically protected against derailing and jamming.

## **GH Combi-lock, automatic**

### **Intended use**

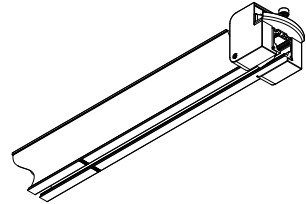
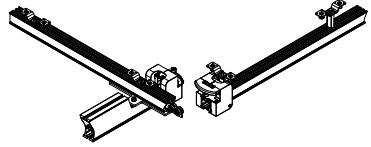
The Combi-lock is used to move a person from one rail system to another.

### **Purpose**

Use the Combi-lock when connecting one rail system to another.

The Combi-lock enables a secure connection to be made between two rail systems, e.g. when operating from a single-track rail system in the bedroom to a room-covering system in the bathroom.

The Combi-lock requires no manual operations.



### **Using the Combi-lock**

When activating the Combi-lock, position the traverse rail opposite the fixed rail, where the locking mechanism is automatically activated (the rail systems lock together). Now it is possible to run the hoist from one rail system to the other. When the traverse rail is moved away from the fixed rail, the locking mechanisms are re-activated to secure the hoist and prevent it from running off the rail. The hoist must always be run completely past the Combi-lock before the traverse rail is moved away (the Combi-lock must be visible).

The rail systems are optimally connected at a max. distance of 1000 mm between the hoist and the Combi-lock; you may also refer to the marking label on the rail. At this distance, a secure and easy connection can be made. At a distance greater than 1000 mm, it is more difficult to position the two rail systems opposite one another. Please note that the connection works regardless of the position of the hoist in relation to the Combi-lock.

### **Safety**

- In the event of an error while using the Combi-lock, discontinue its use. Contact the Guldmann Service Team or a certified technician to perform any necessary repairs. A defective Combi-lock can result in injury to both the user and helper.
- The locking mechanism in the Combi-lock must not be manually activated.
- The Combi-lock is mechanically secured to prevent de-railing and crushing.
- Do not touch the Combi-lock during activation/deactivation

### **Cleaning**

See section 6.01

### **Daily maintenance**

Ensure that the Combi-Lock is intact. Do not use the Combi-lock if it is damaged or defective. Instead, contact the Guldmann Service Team or a certified technician, as per Guldmann's instructions.

## Battery

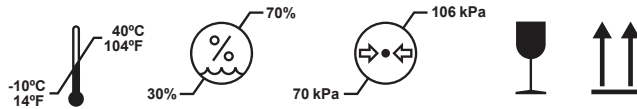
NiMH Battery 24V/2000mAh, Guldmann type number 550574.

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### 5.00 Transport and storage

Guldmann recommends that the products are always transported and stored in the original packaging.

#### Key to symbols on the packaging:



The products should be stored at:

- Temperatures between -10 and +40°C / 14 and 104°F
- A relative air humidity of between 30 and 70 %
- An air pressure of between 700 and 1060 hPa
- This side up

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### 6.00 Maintenance and storage

#### 6.01 Cleaning

We recommend that the product and the parts that patients and caregivers can come in contact with are cleaned with Novadan Des Wipes or Novadan Desinfect O.

**Desinfect O:** A broad-spectrum disinfectant system as tablets. Suitable for disinfection of equipment, tools and surfaces in the healthcare sector.

**Novadan Des Wipes:** Is a disposable wipe for cleaning and disinfection of all types of surfaces, machines and instruments in the healthcare sector.

**NB:** Do never clean the hoist, hanger, trolley, rails etc. with strong acid, base or alcohol. Never clean the hoist in an autoclave.

Desinfect O is effective against:	Novadan Des Wipes is effective against:
<i>Microbial- &amp; Virus test</i>	
<ul style="list-style-type: none"> <li>• Staphylococcus aureus (ATCC 6538) (EN 13697:2001)</li> <li>• Enterococcus hirae (ATCC 10541) (EN 13697:2001)</li> <li>• Escherichia coli (ATCC 10536) (EN 13697:2001)</li> <li>• Pseudomonas aeruginosa (ATCC 15442) (EN 13697:2001)</li> <li>• Candida albicans (ATCC 10231) (EN 13697:2001)</li> <li>• Swine plague - Bovine viral diarrhea virus (BVDV) (EN 14675:2006)</li> <li>• Swine and avian flue (Influenza A virus H1N1) (EN 14675:2006)</li> </ul>	<ul style="list-style-type: none"> <li>• Staphylococcus aureus</li> <li>• Escherichia coli</li> <li>• Proteus mirabilis</li> <li>• Pseudomonas aeruginosa</li> <li>• Candida albicans</li> <li>• MRSA</li> <li>• H1N1</li> <li>• HBV (HIV)</li> <li>• HCV</li> </ul>

Novadan product	Description	Microbial and Virus test	Application	Dosing	Frequency
Desinfect O	A broad-spectrum disinfectant system as tablets.	Staphylococcus aureus, Enterococcus hirae, Escherichia coli, Pseudomonas aeruginosa, Candida albicans, Swine plague - Bovine viral diarrhea virus (BVDV), Swine and avian flu. (Influenza A virus H1N1)	Tools apparatus (Remember to wash afterwards)	1 tablet –10 l of water  Time before effect: 5 min.	Daily/ periodically
Novadan Des Wipes	Is a disposable wipe for cleaning and disinfection of all types of surfaces, machines and instruments within the health-care sector and food industry.	Staphylococcus aureus, Escherichia coli, Proteus mirabilis, Pseudomonas aeruginosa, Candida albicans, MRSA, H1N1, HBV (HIV), HCV	Lifting pool with adjustable handle, bed guard, remote control of beds, extension piece for bed guards, handle, polyester line for lifting pool.	Time before effect: 1 min.  Apart from H1N1: 30 min	After every touching

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6.02

**Storage**

See 5.00

For long-term storage of GH1 F the emergency stop must be activated. This ensures that the battery is not being discharged.

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6.03

**How to prevent/avoid corrosion?**

When the products are mainly used in an corrosive environment, e.g. swimming pool, the products must be ordered with a special corrosion-preventive surface treatment. The preventive surface treatment must be replicated minimum annually.

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6.04

**The owner's daily maintenance duty**

Check the lifting sling for wear and damage before use.

Do not use the lifting sling if it is damaged or defective.

Do not use GH1 F if the lifting strap or the rubber safety catch of the lifting hanger are damaged or defective.

Contact your supplier and order a new lifting sling or a replacement of the lifting strap. Replacement of the lifting strap must only be performed by the Guldmann Service Team or by a qualified technician in accordance with Guldmann's instructions.

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6.05

**Disposal of the GH1 F including battery**

Local and national regulations on environmentally correct recycling must be observed. Batteries (type NiMH) must always be delivered to an approved recycling point.

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7.00

**Service and lifetime**

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7.01

**Lifetime**

The products have an expected lifetime of 15 years, on the condition of correct use and correct service inspections (*see section 7.02*).

**Replacement of components**

Replacement of batteries, PCBs and lifting straps must be performed by a qualified service technician or the Guldmann Service Team.



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**7.02****Safety/service inspections**

In accordance with international standard EN/ISO 10535 "Hoist for the transfer of disabled persons – Requirements and test methods" an inspection should be performed on the hoist at least once a year.

Guldmann recommends that regular safety/service inspection is performed at least once a year with regard to the pattern of usage.

Safety/service inspections of the products must be performed by a qualified service technician or the Guldmann Service Team. In connection with the purchase Guldmann may offer a service agreement for this inspection.

During the safety/service inspection a report must be prepared on what was checked and replaced. Parts that are worn or defective must be replaced with new parts from Guldmann. Spare parts drawings and documentation can be obtained from the manufacturer or supplier.

**Documentation/checklist regarding safety/service inspection can be obtained from the manufacturer or supplier.**

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**7.03****Service inspection, travelling trolley for GH1 F**

Deinstall GH1 F and put it on the transport trolley before service inspections of the Travelling trolley for GH1 F are carried out.

**1. Visual control of the trolley**

- Check for wear, irregularities, or other types of damage to the hoist

**2. Remove cover/screen**

- Clean the trolley to remove dirt and other impurities
- Inspect and evaluate vital parts

Every second year or after 2000 installations:

- Dismantle the complete locking and winding mechanism
- Install new, complete Quick lock (spare part)
- If the cord doesn't show any sign of wear it can be in use for another year

**3. Replace cover/screen****4. Adjust the length of the cord in relation to the height of the rail****5. Carry out installation and deinstallation of GH1 F**

- Check all product functions

**6. Have new problems arisen or been found under item 5?**

- If new problems have arisen, return to item 2
- If there are no new problems, the service inspection has been completed

**7. When a service inspection including service work or exchange of components has taken place, the final check must comprise a weight test with the product's nominal load.**

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**7.04****Trouble-shooting, GH1 F**

GH1 F lifting/lowering functions fail to respond when the hand control's up/down keys are pressed.

- Check that the emergency stop/emergency lowering device have not been activated
- Check that the hoist's indicator lamp is green when activating the hand control (*see section 2.04*).

**Is the product installed in the travelling trolley/rail system?**

If NO

- Contact the Guldmann Service Team  
The hand control may be defective

If YES

- Contact the Guldmann Service Team  
GH1 F may have been incorrectly installed

**The GH1 F does not respond to the hand control's keys**

1. Check that the emergency stop is not activated (*see section 3.01*).
2. Check that GH1 F has power supply and that the battery is recharged (*see section 2.04*).
3. Check that the power supply is on and connected to the hand control.
4. Charge GH1 F (*see section 2.04*).
5. Contact the Guldmann Service Team if the fault cannot be found and corrected.

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**7.05****FAQ's**

Can GH1 F be installed/deinstalled while a person is sitting in the lifting sling?

No – GH1 F measures the load on the lifting strap before installation/deinstallation. If the load exceeds the weight of the lifting hanger, the sequence for installation/deinstallation cannot be activated.



CE marking



Type B in accordance with UL/EN 60601-1



Read the manual before use



Must not be disposed of as standard household waste, must be recycled.

Class 2 equipment . . . . . Non-permanent installation without protective ground

The equipment is not suitable for use in the presence of flammable mixtures.

**Degree of protection against harmful ingress of liquids (water)**

Lifting module. . . . . IP 20

Hand control. . . . . IP 42

## Examples of labels

### Lifting module

GH1F 250 110 0000

**max 255 kg/560 lbs**

V. Guldmann A/S  
Graham Bells Vej 21-23A  
8200 Aarhus N, Denmark  
Made in Denmark  
yyyy-mm-dd

**Guldmann®**

<b>REF</b> xxxxxx			
<b>SN</b> xxxxxx	36V, 0.83A, IP20 Duty cycle 2 min. ON/18 min. OFF		
<b>Guldmann®</b>			Barcode 128C/GS1-128

### Power supply

**SINPRO**  
SWITCHING POWER SUPPLY  
MODEL NO. : HPU31B-110  
INPUT : 100-240V ~ 47-63Hz  
0.6-0.4A  
OUTPUT : 36V = 0.83A max

Indoor use only

Efficiency Level

アビリティーズ・ケアネット株式会社

**CAUTION**  
DO NOT OPEN  
RISK OF ELECTRIC SHOCK  
ATTENTION RISQUE DE CHOC ELECTRIQUE  
NE PAS OUVRIR

RoHS XX MADE IN

### Lifting hanger

**max  
xxx kg/xxx lbs**

Part no. xxxxxx  
Edition xxx  
Prod. date yyyy-mm-dd  
Serial no. xxxxx

Barcode 128C

V. Guldmann A/S  
www.guldmann.com

### Hand control

Part no. xxxxxx  
Edition xxx  
Date xxx-xx-xx  
IP44

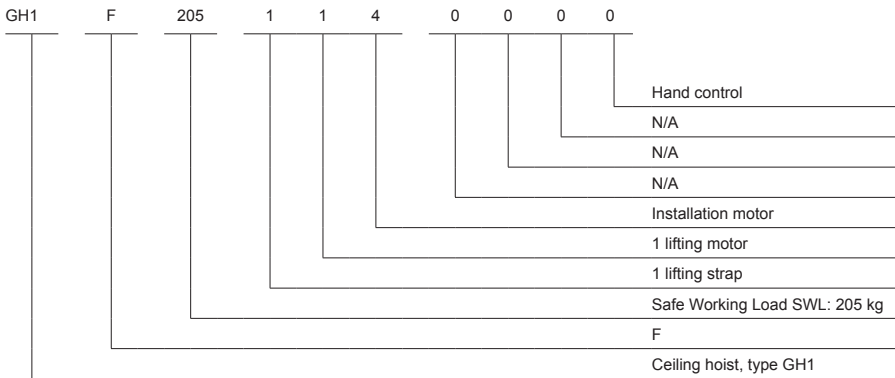
9.00

Technical specifications

GH1 F Lifting modules, configurations									
Guldmann hoist type	Product line	Load in kg	Number of lifting straps	Number of lifting motors	Additional functions	Scale module	CLM module	Service module	User interface
GH1	(x)	xxx	x	x	x	x	x	x	x
GH1	F	175	1	1	4				0
		205	1	1	4				
		255	1	1	4				

**Example: GH1 F 205 114 000**

GH1	F	205	1	1	4	0	0	0	0
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### Functions

Lifting capacity, SWL . . . . 175 kg (385 lbs), 205 kg (450 lbs), 255 kg (560 lbs)  
Operation . . . . . Hand control  
Sound level . . . . . 52 dB (A)

### Lifting speed

85 kg (187 lbs) load . . . . . 40 mm/sec.  
150 kg (330 lbs) load . . . . . 40 mm/sec.  
Max capacity load, SWL . . . . . 40 mm/sec.  
Max. 5 kg (11 lbs) load . . . . . 40/80 mm/sec.

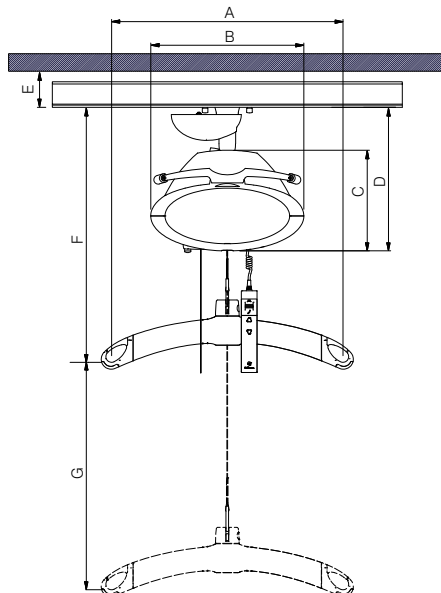
### Weight and materials

SWL . . . . . 175 kg (385 lbs), 205 kg (450 lbs), 255 kg (560 lbs)  
Hoist . . . . . 11.0 kg  
Hoist including trolley . . . . . 12.2 kg

Covers, top and bottom . . . . . shock-proof UL 94 V-O fire-resistant  
recirculates plastic

### Dimensions

A . . . . . 530 mm  
B . . . . . 350 mm  
C . . . . . 230 mm  
D . . . . . 330 mm  
E, min . . . . . 59 mm  
F, min . . . . . 580 mm  
G . . . . . 2500 mm  
Depth of hoist . . . . . 194 mm



## Safety

Emergency stop	Yes
Emergency lowering device	Yes, electrical
Control of lifting strap	Yes
Cut-off angle	.45° along the rail 10° across the rail

## Electronics

On/off	Automatic when used. Soft start/stop
Overload protection	Automatic
Low battery protection	Automatic
Power supply	36 V DC, 0.83 A
Supply voltage	100-240 V AC, 47-63 Hz

Battery	24 V NiMH
SWL: 175 kg (385 lbs), 205 kg (450 lbs), 255 kg (560 lbs)	2.0 Ah

Continuous operation with short time loading with 3 hours without recharging	10/90 % (2 min. operation/18 min. pause)
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Max number of lifts in series with:

85 kg (187 lbs)	55/1000 mm
175 kg	39/1000 mm
205 kg	32/1000 mm
255 kg	21/1000 mm

Max charging time at 25°C (77°F)	3 hours
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Operating temperature	10°C - 35°C (50°F - 95°F)
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## Degree of protection against harmful ingress of liquids (water)

Lifting module	IP 20
Hand control	IP 42

### Travelling trolley for GH1 F

A	98 mm (3.5")
B	166 mm (6.5")
C*, max.	2800 mm (110")
D, min.	650 mm (25.5")
D, max.	750 mm (29.5")
Depth of travelling trolley	84 mm (3")

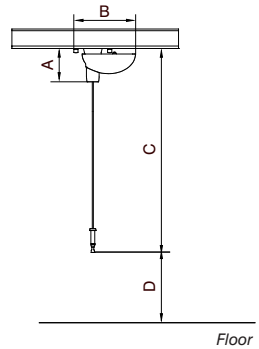
\*Cord length C adapted to height of rail during installation

Max. load . . . . . 255 kg (560 lbs)

Weight:

Travelling trolley (with the exclusion of lifting modules)

GH1 F) . . . . . 1.2 kg (2.5 lbs)



### Transport trolley for GH1 F

A	1005 mm (39.5")
B	735 mm (29")
Depth of transport trolley	485 mm (19")

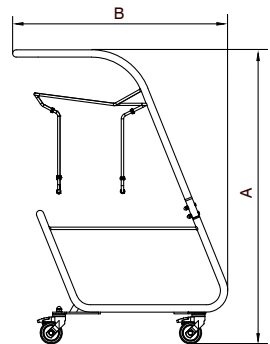
Capacity, bag . . . . . 2-3 slings

. . . . . 2-3 lifting hangers

Capacity, max . . . . . 25 kg

Weight:

Trolley including bag . . 10.4 kg (23 lbs)



## 10.00

### EC-Declaration of conformity

The products are manufactured in compliance with the Council Directive 93/42/EEC of 14 June 1993 – with amendments, as medical device class 1.



Guldmann is continuously working towards ensuring that the company's impact on the environment, locally and globally, is reduced to a minimum.

It is Guldmann's goal to:

- Comply with the current environmental legislation (e.g. WEEE and REACH directives)
- Ensure that we, at the widest possible range, use RoHS compliant materials and components
- Ensure that our products do not have an unnecessary negative impact on the environment regarding use, recirculation or disposal
- Ensure that our products contribute to a positive working environment in the places they are utilised

Inspections are made annually by the Department for Nature and Environment from the Municipality of Aarhus using the Danish Environmental Protection Act, section 42 as a reference.

## USA and countries outside the EU

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### A. **Users guide**

Before using the product, read the entire operation manual including warranty.

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### B. **WARRANTY**

Guldmann warrants its equipment is free from material defects under normal use, and will perform substantially in accordance with the specifications set forth in documentation provided with the equipment.

This express warranty shall be in effect for one year from the date of original purchase and installation (the "Warranty Period"). If a valid claim is made during the Warranty Period for malfunction or equipment defect, Guldmann will repair or replace the equipment at no additional cost to you. Guldmann retains sole discretion as to whether the equipment will be repaired or replaced.

This warranty shall be null and void if the equipment is operated and maintained in any manner inconsistent with its intended use or the instructions provided with the product. Further, in order for the warranty to remain in effect for the full Warranty Period, all service to the equipment must be provided by a Guldmann designated technician. Any parts or components repaired or replaced by a Guldmann designated technician will be guaranteed for the remainder of the Warranty Period.

The warranty does not cover any part of the equipment which has been subject to damage or abuse by the user or others. The warranty does not cover any part of the equipment which has been altered or changed in any way by the user or others. Guldmann does not warrant that the lifting device functions will meet your requirements, be uninterrupted or error free.

The warranty set forth is in lieu of all other express and implied warranties, whether oral, written or implied, and the remedies set forth above are your sole and exclusive remedies. Only an authorized officer of Guldmann may make modifications to this warranty, or additional warranties binding on Guldmann. Accordingly, additional statements such as advertising or presentations, whether oral or written, do not constitute warranties by Guldmann.

#### **Service or Repair**

Contact Guldmann Repair for an authorization to return any defective item during the Warranty Period. You will be provided with a return authorization number and address for returning the item for warranty service or replacement. Do not return items to Guldmann under warranty without receiving a Return Authorization Number.

If mailing the item, pack it carefully in a sturdy carton to prevent damage. Include your Return Authorization Number, a brief description of the problem and your return address and phone number. Guldmann does not assume the risk of loss or damage while in transit, so it is recommended you insure the package.



| Time to care |

**V. Guldmann A/S**

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